

First risk assessment of shale gas fracking to biodiversity

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Fracking, the controversial method of mining shale gas, is widespread across Pennsylvania, covering up to 280,000 km² of the Appalachian Basin. New research in the *Annals of the New York Academy of Sciences* explores the threat posed to biodiversity including pollution from toxic chemicals, the building of well pads and pipelines, and changes to wetlands.

"[Shale gas](#) has engendered a great deal of controversy, largely because of its impact on human health, but effects on [biological diversity](#) and resources have scarcely been addressed in the public debate," said study author Erik Kiviat.

"This study indicated a wide range of potential impacts, some of which could be severe, including salinization of soils and surface waters and fragmentation of forests. The degree of industrialization of shale gas landscapes, and the 285,000 km² extent of the Marcellus and Utica shale gas region alone, should require great caution regarding impacts on biodiversity."

More information: Erik Kiviat, 'Risks to biodiversity from hydraulic fracturing for natural gas in the Marcellus and Utica shales', *Annals of the New York Academy of Science*, Wiley, [DOI: 10.1111/nyas.12146](https://doi.org/10.1111/nyas.12146)

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